Abstract

Fuel system is a system that is very important, because without combustion engine, the machine can not generate power. Injector is a component of the fuel system that set spray form (injection) fuel which is injected into the cylinder. Form of fuel injection for the purpose of atomization and penetration. In this paper, the simulation has been performed using GT-POWER software to determine the best engine performance in direct injection diesel engines with variation of diameter and number of injector holes. From the simulation results obtained that the smaller the diameter of the nozzle holes, the lower the power and torque, and the more fuel is injected.

Keyword: injector, modeling, engine performance